Grade 6 Math – The International School of Beijing

Unit 4: Factors, Multiples & Prime Numbers Outline

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| **Review: Number Operations** | |
| **Objectives** | Students should be able to   * Use the Order of Operations to solve equations with more than one operation * Simplify and mentally solve equations using the properties of numbers * Translate word sentences to number sentences using appropriate symbols |
| **Guiding Questions** | How do we use the order of operations?  What are some strategies we can use to help us solve number equations?  How do we use and interpret the language of math? |
| **Resources** | Signpost Chapter 3 – Number: It’s Order and Structure  3:01 Order of Operations  3:02 Number Properties  3:03 Language & Symbols of Mathematics  3:04 Special Sets of Whole Numbers  Vocabulary  counting numbers • cardinal numbers • decrease • difference • distributive property • even numbers • odd numbers • grouping symbols • increase • number properties • order of operations • product • quotient • sum |
| **Factors and Multiples** | |
| **Objectives** | Students should be able to   * List all the factors of a particular number * List all the common factors of two or more numbers * Determine the greatest/highest common factor of two or more numbers * List the multiples of a particular number * List the common multiples of two or more numbers * Determine the lowest common multiple of two or more numbers * Solve word problems involving factors and multiples |
| **Guiding Questions** | What is a factor?  What is a multiple?  How are factors and multiples related?  How can we find common multiples and factors to help us solve different word problems? |
| **Resources** | Signpost Chapter 3 – Number: It’s Order and Structure  3:05 Factors and Multiples  3:07 Divisibility Tests  Vocabulary  factor • common factor • greatest/highest common factor (GCF or HCF) • multiple • common multiple • lowest common multiple (LCM) |
| **Prime Numbers** | |
| **Objectives** | Students should be able to   * Identify prime numbers * Identify composite numbers * Give the prime factorization of a number |
| **Guiding Questions** | How do we determine if a number is prime or composite?  How do we factorize a number?  Is 1 prime or composite? |
| **Resources** | Signpost Chapter 3 – Number: It’s Order and Structure  3:06 Prime and Composite Numbers  Vocabulary  composite number • prime number • |